



SEQUENCE LISTING

<110> UNIVERSITE CATHOLIQUE DE LOUVAIN
UNIVERSITE DE MONS-HAINAUT

<120> Peroxisome-associated polypeptide, nucleotide sequence encoding said polypeptide and their uses in the diagnosis and/or treatment of lung injuries and diseases, and of oxidative stress-related disorders

<130> DECLE30.001CP1

<140> US 10/686,157

<141> 2003-10-15

<150> US 6,759,194

<151> 2000-08-15

<150> PCT/BE98/00124

<151> 1998-08-20

<150> BE 1011331

<151> 1997-08-20

<160> 21

<170> PatentIn version 3.3

<210> 1

<211> 805

<212> DNA

<213> Homo sapiens

<400> 1

gccaggaggg	ggagtggaa	tggccgtggg	gcgggtatgg	gactagctgg	cgtgtgcgcc	60
ctgagacgct	cagcgggcta	tatactcgtc	ggtggggccg	gcggtcagtc	tgcggcagcg	120
gcagcaagac	ggtgcagtga	aggagagtgg	gcgtctggcg	gggtccgcag	tttcagcaga	180
gccgctgcag	ccatggcccc	aatcaaggtg	ggagatgcca	tcccagcagt	ggaggtgtt	240
gaaggggagc	cagggAACAA	ggtgaacctg	gcagagctgt	tcaaggcCAA	gaagggtgtg	300
ctgtttggag	ttcctggggc	cttcacccct	ggatgttcca	agacacacct	gccagggttt	360
gtggagcagg	ctgaggctct	gaaggCCAAG	ggagtccagg	tggTggcctg	tctgagtgtt	420
aatgatgcct	ttgtgactgg	cgagtggggc	cgagcccaca	aggcggagg	caaggttcgg	480
ctcctggctg	atcccactgg	ggcTTTggg	aaggagacag	acttattact	agatgattcg	540
ctgggtgtcca	tctttggaa	tcgacgtctc	aagaggttct	ccatggtggt	acaggatggc	600
atagtgaagg	ccctgaatgt	ggaaccagat	ggcacaggcc	tcacctgcag	cctggcaccc	660
aatatcatct	cacagctctg	aggccctggg	ccagattact	tcctccaccc	ctccstatct	720

cacctgcccc	gccctgtgct	ggggccctgc	aatttggaaatg	ttggccagat	ttctgcaata	780
aacacttgtg	gtttgcggaa	aaaaaa				805
<210>	2					
<211>	162					
<212>	PRT					
<213>	Homo sapiens					
<400>	2					
Met Ala Pro Ile Lys Val Gly Asp Ala Ile Pro Ala Val Glu Val Phe						
1	5	10			15	
Glu Gly Glu Pro Gly Asn Lys Val Asn Leu Ala Glu Leu Phe Lys Gly						
20	25		30			
Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe Thr Pro Gly Cys						
35	40		45			
Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala Glu Ala Leu Lys						
50	55	60				
Ala Lys Gly Val Gln Val Val Ala Cys Leu Ser Val Asn Asp Ala Phe						
65	70	75	80			
Val Thr Gly Glu Trp Gly Arg Ala His Lys Ala Glu Gly Lys Val Arg						
85	90		95			
Leu Leu Ala Asp Pro Thr Gly Ala Phe Gly Lys Glu Thr Asp Leu Leu						
100	105		110			
Leu Asp Asp Ser Leu Val Ser Ile Phe Gly Asn Arg Arg Leu Lys Arg						
115	120		125			
Phe Ser Met Val Val Gln Asp Gly Ile Val Lys Ala Leu Asn Val Glu						
130	135		140			
Pro Asp Gly Thr Gly Leu Thr Cys Ser Leu Ala Pro Asn Ile Ile Ser						
145	150		155		160	
Gln Leu						

<210> 3
 <211> 780
 <212> DNA
 <213> Rattus rattus

<400> 3
 tgcgtcctag gcagcatagc cggatcggtg ctccgtgcat cggtacttg gacgtgcgtg 60
 gcaggcagag caggccggaa aggagcaggt tgggagtgtg gtggggcccg cagttcagc 120
 agtgcgcgg tgactatggc cccgatcaag gtgggagaca ccattccctc agtggaggt 180
 tttgraggaa aacctggaaa gaaggtgaac ttggcagagc tttcaagga caagaaaggt 240
 gtttgtttg gagtcctgg ggcatttaca cctggctgtt ccaagaccca tctgcctgg 300
 tttgtggagc aagccggagc tcygaaggcc aaggagcac aagtggtggc ctgtctgagt 360
 gttaatgatg ytttcgtgac tcagagtgg ggtcgagccc accaggcaga aggcaagg 420
 cagtcctgg ctgacccac tggagctttt ggaaaggaga cagattact actagatgat 480
 tcttttgtt ctctcttgg gaatcgtcg ctaaaaaggt tctccatggt gatagacaag 540
 ggcgtagtaa aggactgaa cgtggagccg gatggcacag gcctcacctg cagcctggcc 600
 cccaacatcc tctcacaact ctgaggccct gaccagaatg tcctctgact ctccatctc 660
 ctccacccag ctctggcca aaggcccagt acctccttac ctgagggcca ctggaatgga 720
 accttgacaa tatttctgca ataaacagtt taatttgtga aaaaaaaaaa aaaaaaaaaa 780

<210> 4
 <211> 162
 <212> PRT
 <213> Rattus rattus

<220>
 <221> MISC_FEATURE
 <222> (17)..(17)
 <223> X = E or G

<220>
 <221> MISC_FEATURE
 <222> (63)..(63)
 <223> X = L or P

<220>
 <221> MISC_FEATURE
 <222> (79)..(79)
 <223> X = L or P

<400> 4

Met Ala Pro Ile Lys Val Gly Asp Thr Ile Pro Ser Val Glu Val Phe

1 5 10 15

Xaa Gly Glu Pro Gly Lys Lys Val Asn Leu Ala Glu Leu Phe Lys Asp
20 25 30

Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe Thr Pro Gly Cys
35 40 45

Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala Gly Ala Xaa Lys
50 55 60

Ala Lys Gly Ala Gln Val Val Ala Cys Leu Ser Val Asn Asp Xaa Phe
65 70 75 80

Val Thr Ala Glu Trp Gly Arg Ala His Gln Ala Glu Gly Lys Val Gln
85 90 95

Leu Leu Ala Asp Pro Thr Gly Ala Phe Gly Lys Glu Thr Asp Leu Leu
100 105 110

Leu Asp Asp Ser Leu Val Ser Leu Phe Gly Asn Arg Arg Leu Lys Arg
115 120 125

Phe Ser Met Val Ile Asp Lys Gly Val Val Lys Ala Leu Asn Val Glu
130 135 140

Pro Asp Gly Thr Gly Leu Thr Cys Ser Leu Ala Pro Asn Ile Leu Ser
145 150 155 160

Gln Leu

<210> 5
<211> 675
<212> DNA
<213> Mus musculus

<400> 5
tgctccgtgc atcgacgtgc ttggcaggca gagcaggccg gaaagaagca ggttggagt 60
gtggcggagc ccgcagcttc agcagctccg cggtgaccat ggccccgatc aagggtggag 120
atgccattcc ctcagtgag gtatttgaag gggAACCGGG aaagaaggta aacttggcag 180
agctgttcaa gggcaagaaa ggtgtttgt ttggagtccc tggggcattt acacctggct 240

gttcttaagac ccacctgcct	gggtttgtgg	agcaagctgg	agctctgaag	gctaaggag	300
cgcagggttgt	ggcctgtctg	agcgtaatg	acgtcttgt	gattgaagag	360
cccaccaggc	agaaggcaag	gttcggctcc	tggctgaccc	cactggagcc	420
cgacagactt	attattggat	gattcttgg	tgtctctctt	tggaatcgt	480
ggttctccat	ggtgatagac	aacggcatag	tgaaggcact	gaacgtggag	540
caggcctcac	ctgcagcctg	cccccaaca	tcctctcca	actctgaggc	600
tgtcctctga	ctctccatc	tctcccaccc	ggctcttaggc	caaaaggctc	660
tactgggagc	cacgt				675

<210> 6
<211> 162
<212> PRT
<213> Mus musculus

<400> 6

Met Ala Pro Ile Lys Val Gly Asp Ala Ile Pro Ser Val Glu Val Phe			
1	5	10	15

Glu Gly Glu Pro Gly Lys Lys Val Asn Leu Ala Glu Leu Phe Lys Gly		
20	25	30

Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe Thr Pro Gly Cys		
35	40	45

Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala Gly Ala Leu Lys		
50	55	60

Ala Lys Gly Ala Gln Val Val Ala Cys Leu Ser Val Asn Asp Val Phe			
65	70	75	80

Val Ile Glu Glu Trp Gly Arg Ala His Gln Ala Glu Gly Lys Val Arg		
85	90	95

Leu Leu Ala Asp Pro Thr Gly Ala Phe Gly Lys Ala Thr Asp Leu Leu		
100	105	110

Leu Asp Asp Ser Leu Val Ser Leu Phe Gly Asn Arg Arg Leu Lys Arg		
115	120	125

Phe Ser Met Val Ile Asp Asn Gly Ile Val Lys Ala Leu Asn Val Glu

130

135

140

Pro Asp Gly Thr Gly Leu Thr Cys Ser Leu Ala Pro Asn Ile Leu Ser
145 150 155 160

Gln Leu

<210> 7
<211> 469
<212> DNA
<213> Homo sapiens

<400> 7
ggtatggga ctagctggcg tgtgcgcct gagacgctca gcgggctata tactcgtcgg 60
tggggccggc ggtcagtctg cgccagcggc agcaagacgg tgcagtgaag gagagtggc
gtctggcggg gtccgcagtt tcagcagagc cgctgcagcc atggcccaa tcaaggttcg 120
gctcctggct gatcccactg gggctttgg gaaggagaca gacttattac tagatgattc
gctggtgtcc atctttggga atcgacgtct caagaggttc tccatggtgg tacaggatgg
catagtgaag gccctgaatg tggaaaccaga tggcacaggc ctcacctgca gcctggcacc
caatatcatc tcacagctct gaggccctgg gccagattac ttccctccacc ctccttatac
tcacctgccc agccgtgtgc tggggccctg caatttggaaat gttggccag 469

<210> 8
<211> 601
<212> DNA
<213> Homo sapiens

<400> 8
ggtatggga ctagctggcg tgtgcgcct gagacgctca gcgggctata tactcgtcgg 60
tggggccggc ggtcagtctg cgccagcggc agcaagacgg tgcagtgaag gagagtggc
gtctggcggg gtccgcagtt tcagcagagc cgctgcagcc atggcccaa tcaagacaca
cctgccagg 60
tttgtggagc aggctgaggc tctgaaggcc aaggggatcc aggtggtggc 120
ctgtctgagt gttaatgtatg cctttgtac tggcgagtgg ggccgagccc acaaggcgg
aggcaagg 180
ttt cggctcctgg ctgatcccac tggggcctt gggaggaga cagacttatt
actagatgtatg tgcgtgggtgt ccatcttgg gaatcgacgt ctcaagaggt tctccatgg
ggtacaggat 240
ggcatagtga aggccctgaa tgtggAACCA gatggcacag gcctcacctg
cagcctggca cccaatatca tctcacagct ctgaggccct gggccagatt acttcctcca 480
540

<210> 9
<211> 604
<212> DNA
<213> *Homo sapiens*

<400> 9
gggtatggga ctagctggcg tgtgcgcctt gagacgctca gcgggctata tactcgtcgg 60
tggggccggc ggtcagtctg cggcagcggc agcaagacgg tgcatgtaa gagagtgggc 120
gtctggcggg gtccgcagtt tcagcagagc cgctgcagcc atggcccaa tcaagggtggg 180
agatgccatc ccagcagtgg aggtgtttga aggggagcca gggacaagg tgaacctggc 240
agagctgttc aagggaaga agggtgtgct gtttgaggtt cctggggcct tcaccctgg 300
atgttccaag gttcggtcc tggctgatcc cactggggcc tttggaaagg agacagactt 360
attactagat gattcgctgg tgtccatctt tggaatcga cgtctcaaga gttctccat 420
ggtgttacag gatggcatag tgaaggccctt gaatgtggaa ccagatggca caggcctcac 480
ctgcagcctg gcacccaata tcatctcaca gctctgaggc cctggccag attacttcct 540
ccacccctcc ctatctcacc tgcccagccc tgtgctgggg ccctgcaatt ggaatgttgg 600
ccaaq 604

```
<210> 10
<211> 2710
<212> DNA
<213> Homo sapiens
```

```
<400> 10
tctgtccctt agcgcccccg cgggggctta ccccatccca ctccatgacc tccccctcccc 60
ccatggcgaa ttcccacctt tctgtctttc actcaacttc tggaaccgtc cccagggcct 120
tggaccttcc cccttctcct cccaaacctt gtgagacccc attcccttcc tacttcattcc 180
tgctctcaac ttttgggctc ctcagaggcc ctcacccctg actctctctc cctacccact 240
ctggtcccat gaagccctca agtactctgg ggtatggatcc ttcccccttc aaaagattcc 300
ttctttgtt ctacacctcc tgggtgttagg ggcctggaca ccctccccca acgttccacc 360
tgccgctgcc cttcctcttc ctccctcctga gggtgggacc ctcagacactg gccaagatcc 420
tctccctcca ttttgtcagg qactccctt caccggggaaa tacagccctc tagccccctgt 480
```

ccattttatt ccactcctt cctgtaacct agacagcatg ttatgcaacc ct当地cgaca	540
catggggaaa cttccctcc cttcctctgt tgtcaccaat ggcccctaa gaggagcagg	600
gccacctga aacttggagg atatgggtta acccagtggg agcgggcagg gagggccctt	660
ggaaactgac agggctggag ttcctgctg ggtttcagcc ccggttcctg caggcacagc	720
tgcaggctc tctgttcacc ttccctgcctc tggttgccc cggctccctc accccccta	780
ccctggagtc cttccttcta ggtggagat gccatcccag cagtggaggt gtttgaaggg	840
gagccaggaa acaaggtaa cctggcagag ctgttcaagg gcaagaaggg tgtgctgttt	900
ggagttcctg gggccttcac ccctggatgt tccaaggtga ggcccttccc cttctgaaga	960
tcaggacctg gggatcttt gtgttgctct taagtcctcc acatagtcct gataggactc	1020
ctaaaaagca tttcagtgcc atcacaaaac aagtagagct gggtagagct gggcgcggtg	1080
gctcacgcct gtaatcccag cactttggga ggccaaggcg ggtggatcac gaggtcagga	1140
gtccaaaacc agcctggcca agatggtaa accctgtctc tactaaaaat gcaaaaaaat	1200
cagccggata tggtggcggg cgccctgtaat cccaggtatt ggggaggctg aggcaagagaa	1260
ttgcttgaac ccaggaggcg taggttgcag tgagtggaga tcgtgcctct gcagtccagc	1320
ctgggtgaaa gagcgagact ccgtctcaaa atgaaaaaaaaaaa caagtagaga	1380
ctgcaaaaag ggaacagtac cggaatgtt ggagaaaaac atactacaat taaatccaac	1440
accctgttg gtcctgctaa atgacaggca ctgtggaagg tgcttggac tcagataaat	1500
aagacaaaga tctgccccatg gaaagttcac gtctgacca taaggcatta ggttcattc	1560
tgagcttcct agtggccaag gcaaaaaagga aatagaatgg tttagacagc tctcattgtc	1620
tgatcaaagg tggtggaggca gagcaactgag gagggcctgg agataaaggg tgggctgggg	1680
gtcagatgca gttatccctt tgccgaccct ttgttccct tcctcagaca cacctgccag	1740
ggtttggaa gcaggctgag gctctgaaagg ccaagggagt ccaggtggg gcctgtctga	1800
gtgttaatga tgcctttgtg actggcgagt ggggcccgc ccacaaggcg gaaggcaagg	1860
tgaggtgagg ggcctgcagg gagtcaggac cagtaggat attcttcttg tgacctctac	1920
tttctctgca gtttcggctc ctggctgatc ccactgggc ctttggaaag gtgagtggttc	1980
ccctgaccgc cacaggaca tggcggtcg gggagcagtg gggcccttg gcctcttcaa	2040
ggatttctga cactttctc tgtctttct taggagacag acttattact agatgattcg	2100
ctgggtgtcca tctttggaa tcgacgtctc aagaggtaaa agtggagagt cctctgtgga	2160
gaaagtccctc tgtggagag agtcctctgt gggagaggt cctctgtgga gagggccctc	2220

tgtgggaaga gtcgtctgtg	2280
ggggagatgt gtgggagaga	
gtcctgtgtg gggagagtct	
tctgttagggg agagtcctct	2340
ggggagagag tcctgtgtgg	
gggagagtcc tctgtgggaa	
gagtcctctg tgtggagaga	2400
gtcctgtgtg gtggtagtc	
ctctgtgggg gagagtcctc	
tgtgggggaa gtcctctctg	2460
gagttctctt gggccctgg	
ctgttcactg cctgtctcca	
tgcccagcct ccaagcccag	2520
gctgatgcag ctggctggc	
ccctctttcc ggcaggttct	
ccatggtggt acaggatggc	2580
atagtgaagg ccctgaatgt	
ggaaccagat ggcacaggcc	
tcacctgcag cctggcaccc	2640
aatatcatct cacagctctg	
aggccctggg ccagattact	
tcctccaccc ctccctatct	2700
cacctgcccc gccctgtgct	
ggggccctgc aatttgaatg	
ttggccagat	2710

<210> 11
<211> 25
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 11
gccatccca gagtggaggt gtttg . 25

<210> 12
<211> 24
<212> DNA
<213> primer

<400> 12
ttgaacagct ctgccaggtt cacc 24

<210> 13
<211> 24
<212> DNA
<213> primer

<400> 13
tggaggtgtt tgaaggggag ccag 24

<210> 14
<211> 24
<212> DNA
<213> primer

<400> 14
cagttcacc ttgttccctg gctc 24

<210> 15		
<211> 20		
<212> DNA		
<213> primer		
<400> 15		
ggtatggga ctagctggcg	20	
<210> 16		
<211> 22		
<212> DNA		
<213> primer		
<400> 16		
ctggccaaca ttccaaattgc ag	22	
<210> 17		
<211> 24		
<212> DNA		
<213> primer		
<400> 17		
atgttatgca acccttgcg acac	24	
<210> 18		
<211> 24		
<212> DNA		
<213> primer		
<400> 18		
tgtttgaag gggagccagg gaac	24	
<210> 19		
<211> 24		
<212> DNA		
<213> primer		
<400> 19		
agagacaggg tttcaccatc ttgg	24	
<210> 20		
<211> 805		
<212> DNA		
<213> Homo sapiens		
<400> 20		
gccaggaggc ggagtggaaag tggccgtggg gcgggtatgg gactagctgg cgtgtgcgcc	60	
ctgagacgct cagcgggcta tatactcgtc ggtggggccg gcggtcagtc tgcggcagcg	120	

gcagcaagac ggtgcagtga aggagagtgg gcgtctggcg gggccgcag tttcagcaga	180
gccgctgcag ccatggcccc aatcaagggtg ggagatgcca tcccagcagt ggaggtgttt	240
gaaggggagc cagggAACAA ggtGAACCTG gcAGAGCTGT tCAAGGGCAA gaAGGGTGTG	300
ctgtttggag ttccctgggc ctTCACCCCT ggATGTTCCA agACACACCTT GCCAGGGTT	360
gtggagcagg ctgaggctct gaaggCCAAG ggAGTCCAGG TGGTGGCCTG tctgagtgtt	420
aatgatgcct ttgtgactgg cgagtggggc cgagcccaca aggCGGAAGG caaggttcgg	480
ctcctggctg atcccactgg ggcTTTGGG aaggAGACAG acttattact agatgattcg	540
ctggTGTCCA tcttggaa tcgacgtctc aagaggTTCT ccatggTGGT acaggatggc	600
atagtGAAGG ccctGAATGT ggaACCAGAT ggcACAGGCC tcacCTGcAG CCTGGCACCC	660
aatatCATCT cacAGCTCTG aggCCCTGGG ccAGATTACT tcctCCACCC ctccCTATCT	720
cacCTGCCA gCCCTGTGCT gggCCCTGC aattGGAATG ttGCCAGAT ttCTGCAATA	780
aacacttGTG gtttgcggaa aaaaa	805

<210> 21
<211> 214
<212> PRT
<213> Homo sapiens

<400> 21

Met Gly Leu Ala Gly Val Cys Ala Leu Arg Arg Ser Ala Gly Tyr Ile
1 5 10 15

Leu Val Gly Gly Ala Gly Gly Gln Ser Ala Ala Ala Ala Arg Arg
20 25 30

Cys Ser Glu Gly Glu Trp Ala Ser Gly Gly Val Arg Ser Phe Ser Arg
35 40 45

Ala Ala Ala Ala Met Ala Pro Ile Lys Val Gly Asp Ala Ile Pro Ala
50 55 60

Val Glu Val Phe Glu Gly Glu Pro Gly Asn Lys Val Asn Leu Ala Glu
65 70 75 80

Leu Phe Lys Gly Lys Lys Gly Val Leu Phe Gly Val Pro Gly Ala Phe
85 90 95

Thr Pro Gly Cys Ser Lys Thr His Leu Pro Gly Phe Val Glu Gln Ala

100

105

110

Glu Ala Leu Lys Ala Lys Gly Val Gln Val Val Ala Cys Leu Ser Val
115 120 125

Asn Asp Ala Phe Val Thr Gly Glu Trp Gly Arg Ala His Lys Ala Glu
130 135 140

Gly Lys Val Arg Leu Leu Ala Asp Pro Thr Gly Ala Phe Gly Lys Glu
145 150 155 160

Thr Asp Leu Leu Leu Asp Asp Ser Leu Val Ser Ile Phe Gly Asn Arg
165 170 175

Arg Leu Lys Arg Phe Ser Met Val Val Gln Asp Gly Ile Val Lys Ala
180 185 190

Leu Asn Val Glu Pro Asp Gly Thr Gly Leu Thr Cys Ser Leu Ala Pro
195 200 205

Asn Ile Ile Ser Gln Leu
210